

IN THE CLAIMS:

Please cancel Claims 1-12 and substitute therefore new Claims 13-19 as set forth below.

Claims 1-12 (Canceled)

13. (New) A system for storage and mixing of a solution comprising a plurality of ingredients not compatible for long-term storage in a pre-mixed formulation, said system comprising:

- (a) a storage tank divided into a plurality of compartments, each compartment adapted to isolate and store an ingredient, and wherein the storage capacity of each compartment is proportionate to an amount of an ingredient in the mixed solution;
- (b) a plurality of fluid conduits for withdrawing and conveying ingredients from said compartments;
- (c) a manifold coupled to said compartments, wherein said manifold provides for continuous mixing of the ingredients as they are withdrawn from said compartments;
- (d) a sump coupled to an output aperture of said manifold for holding a quantity of the mixed solution and comprising at least one discharge port;
- (e) a plurality of control valves disposed in said fluid conduits for regulating the flow of ingredients from said compartments to said manifold, so that the ingredients are appropriately mixed in said manifold to produce the desired solution;

- (f) a plurality of one way valves disposed in said fluid conduits to prevent a backflow of the ingredients into said compartments;
- (g) a display device to enable monitoring of one or more system parameters; and
- (h) a plurality of fill ports disposed in each compartment for loading ingredients.

14. (New) The system of claim 13, wherein said fluid conduits comprise dip tubes that extend down from an upper level of said compartments to a level near the bottom and include an inlet aperture.

15. (New) The system of claim 13, wherein said manifold comprises a coil disposed around said sump.

16. (New) The system of claim 15, wherein said manifold is positioned at a level above the level of said compartments.

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17. (New) The system of claim 13, wherein said compartments include vents to provide pressure and/or vacuum relief.

18. (New) The system of claim 13, wherein said display device comprises a means for monitoring a liquid level in said compartment.

19. (New) A system for storage and mixing of a solution comprising a plurality of ingredients not compatible for long-term storage in a pre-mixed formulation, said system comprising:

(a) a storage tank divided into a plurality of compartments, each compartment adapted to isolate an ingredient and sized in proportion to the amount of that ingredient required for the solution, wherein the compartments include vents to provide pressure and/or vacuum relief and ports for loading ingredients;

(b) a plurality of fluid conduits for withdrawing and conveying ingredients from said compartments comprising dip tubes that extend down from an upper level of each compartment to draw ingredients up from a level near the bottom of said compartments;

(c) a plurality of control valves positioned in said conduits for regulating the flow of ingredients from said compartments to maintain a desired proportion of ingredients during mixing to produce the desired solution;

(d) a plurality of one way valves disposed in said fluid conduits to prevent backflow of the solution into said compartments;

(e) a manifold to which each fluid conduit for withdrawing and conveying ingredients from said compartments is coupled, said manifold providing continuous mixing of the ingredients as they are withdrawn from said compartments;

(f) a sump coupled to an output aperture of said manifold for holding a quantity of the mixed solution and comprising at least one discharge port for withdrawing the mixed solution, wherein said sump is disposed at a level above said compartments and said manifold is disposed, at least in part, in a coil around said sump; and

(g) a display device to enable monitoring of one or more system parameters.